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SECRETARY



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GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR NATURAL RESOURCES
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663 TETON TRAIL
FRANKFORT, KENTUCKY 40601
TELEPHONE: (502) 564-2184

July 16, 2001

Dr. Ghassem R. Asrar, Associate Administrator
Office of Earth Science
National Aeronautics and Space Administration
NASA Headquarters, Code YO
300 E. St. SW
Washington, D.C.

Re: Support letter for the Kentucky proposal in response to NASA BAA-01-OES-01

Dear Dr. Asrar:

As the Commissioner for the Department for Natural Resources I manage the state "landscape" programs including the Division of Forestry, the Division of Conservation, and the Kentucky State Nature Preserves Commission. While this grant was originally conceived to focus on applications to help manage the 52% of the state covered by forests, the scope and functionality will be operationally much broader. Use of the data and applications will prove cost effective for missions across my entire Department, for private applications, for the statewide Smart Growth initiative, and many others. I have assigned a priority for the two best GIS staff with remote sensing capabilities in the Department to this initiative, as well as making a commitment of my involvement, the help of the staff from the Commissioners Office, and any available line staff participation as requested. I myself served four years on the National Academy of Science Mapping Science Committee, and nine years as a consultant in GIS technology. I was one of the co-authors of *Geographic Information Systems A Guide to the Technology* (Van Nostrand Reinhold, 1991), and have worked with many projects both large and small scale. I have rarely seen among hundreds of multi-agency partnerships, one so well thought out and efficient as the current Kentucky proposal. I believe it puts the right people, agencies, private sector assistance, and a workable plan together.

My Department has the most to gain from the immediately obvious applications. We have a statutory requirement to utilize GIS to move from a ten-year forest inventory to an annual collection and classification of forest cover. We have a great need to apply this data to planning for fire as well as transactionally attacking wildfires. We have severe forest health issues that this system was just made to supplement in both data collection and planned response. We need to provide stewardship plans to thousands of private landowners under the forestry stewardship program. We must prioritize the state's forest resources for the USDA Forest Legacy Program. We need to manage millions of dollars of cost share grants to farmers for water quality improvements. We must regulate many aspects of the logging industry. We must document and complete the county rare species inventories. And on and on . . . But these are the tip of the application iceberg. The Governor has just directed over thirty statewide meetings to investigate Smart Growth principles. We are in a historical effort to deal with water quality problems inherited from 100 years of coal camps with straight pipes. This is part of PRIDE, Congressman Hal Rogers' effort to deal with water quality and illegal garbage in southeast Kentucky, as well as the state watershed steering committee, source water protection, modeling of the headwaters of our major rivers, etc. The visualizations alone from this effort will be priceless additions to the state's policy-making needs. It will find use in many additional federal programs as well.



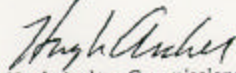
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Kentucky state government agencies as a group have not had the expertise, understanding, and consensus regarding the collection and use of GIS data and technologies until recently. We now have all the basic layers of a NSDI base map under way. This will combine with this project to open the door to land planning in Kentucky in a way that will not bring about a civil war with private property advocates. A statewide landcover initiative, urban interface detail, and the training and application development involved in this initiative will put Kentucky far ahead of our best local efforts if we do not proceed with NASA's support. I am available to discuss the project and any questions you might have for outside partners if needed. My office number is (502)564-2184.

Sincerely,

A handwritten signature in dark ink, appearing to read "Hugh Archer". The signature is fluid and cursive, with the first name "Hugh" and last name "Archer" clearly distinguishable.

Hugh Archer, Commissioner
Department for Natural Resources